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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,722	05/27/2005	Alfred Watzl	1352.44947X00	4347

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EXAMINER
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VANATTA, AMY B

ART UNIT	PAPER NUMBER
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3765

MAIL DATE	DELIVERY MODE
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10/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/536,722

Applicant(s)

WATZL, ALFRED

Examiner

Amy B. Vanatta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I (claims 1-7) in the reply filed on 7/25/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Additionally, the method does not clearly set forth exactly how many layers are being claimed as forming the product. The method does not clearly set forth the manipulative steps which are being claimed as forming the method. It is unclear whether and in what manner the three dimensional material is being claimed as applied to the nonwoven.

In claims 3, 4, 5, and 6, the term "preferably " renders the claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Ngai (US 6,314,627).

Ngai discloses a method of hydrodynamic inclusion of a layer between two coving layers. The layers form three-dimensional finite products to the extent recited in line 2 in that they have dimensions in three directions, and comprise at least two nonwovens. Ngai discloses spraying liquid under pressure from fine nozzle openings arranged in a row from a nozzle strip extending over the width of the bar towards the web (see 12, 28, and 44). Ngai discloses steps of initially consolidating nonwoven 30 using water jets 28, including a middle layer 40, and covering these layers with a further nonwoven 14 which has been prefixed in the same way (i.e. by jets 12). All layers are "then again subject to hydrodynamic needling uniformly over the working width" (see 44) to join the two superimposed covering nonwoven together, as in claim 1. See col. 4, lines 19-48, col. 5, lines 5-65 and Fig. 1. Ngai discloses that wood pulp may be added

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to web 40 (col. 5, lines 61-65), thus forming a step of applying "three dimensional material thereto" as in line 11 of claim 1.

Regarding claim 2, the covering nonwoven(s) may be perforated with fine holes produced by the water jets during the initial hydrodynamic consolidation of the layers (see col. 2, lines 30-32; col. 3, lines 4-5; and col. 5, lines 1-4).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai (US 6,314,627).

Ngai discloses a method as claimed, however the number of water jets and their spacing is not disclosed for the jets 12, 28, or 44. It is within the routine skill in the art to determine the optimal jet number and spacing, however, through routine experimentation, based upon the desired end properties of the nonwoven, the jet pressure, and other processing parameters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use 5-20 water jets for the nozzles in the method of Ngai, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Similarly, it would have

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been obvious to one having ordinary skill in the art at the time the invention was made to use 10 jets per inch in the method of Ngai, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

8. Claims 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngai (US 6,314,627) in view of Skoog et al (US 6,177,370).

Regarding claims 4 and 6, Ngai discloses a method as claimed, however the pressure of the water jets is not disclosed. Skoog et al disclose a method of making a nonwoven including two cover layers and a middle layer therebetween, with the layers hydroentangled together. Skoog discloses the use of water jet pressures of 11,000,000 to 12,000,000 Pascals (see, e.g., col. 9, line 52; col. 12, line 10), which is 110-120 bar. Thus, Skoog teaches the use of water jet pressures which are within the claimed range. It would be within the level of ordinary skill to determine the optimal pressure for the jets in the method of Ngai, through routine experimentation, based upon the desired end properties of the nonwoven, the jet pressure, and other processing parameters. Furthermore, one would look to the teachings of Skoog for optimal jet pressures. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use water jet pressures within the range of 100-200 bar in the method of Ngai, since such pressures are typical in the art, as taught by Skoog et al, and it has been held that where the general conditions of a claim are disclosed in the prior art,

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discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

As to claim 7, Ngai does not teach needling the covering nonwovens on both sides. Skoog et al teaches needling on both sides (col. 10, lines 20-26 and col. 12, lines 2-17), as is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to needle the covering nonwovens on both sides in the method of Ngai, since such needling is conventional in the art, as taught by Skoog et al, in order to produce a more uniform and stable product.

### ***Conclusion***


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Amy B Vanatta  
Primary Examiner  
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